

Business Technology Alignment Process Reference Guide

Version 2.0

August 15, 2003

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2 Executive Summary

FSA's Business-Technology Alignment (BTA) process aligns technology related decisions to business needs and priorities. It is used to help new development efforts follow FSA's technology standards and facilitate identification and agreement of new standards as new technologies are introduced into FSA. FSA's BTA process utilizes a pragmatic, "just-in-time" approach to development of technical architecture standards. The approach is to develop and recommend technical standards on an as-needed basis for the specific project needs while taking an enterprise perspective. The BTA process consists of four main phases, each consisting of multiple activities, as depicted below:

Phases	Issue Identification and Scoping	2. Analysis and Recommendation	3. Acceptance	4. Communication and Documentation
Activities	 Identify issue: need for technical standard introduction of new technology Escalate Issue Scope the issue 	 Sponsor analysis Assign responsibility for analysis Conduct analysis Perform due diligence: ASG Review Recommend standards 	 Select option (if appropriate): Architecture Working Group Review Request additional analysis, or accept recommendation(s) 	 Document and communicate new standards Implement recommended solution(s)

The major activities are summarized below:

Phase	Activity	Performed By	Action Taken
1. Issue Identification and Scoping	Identify issue: - need for technical standard - introduction of new technology	Project technical lead, or Enterprise Architecture Technical Lead, or - CIO staff	Escalate issue to the: - FSA Chief Architect. Denise Hill 202-377-3030 denise.hill@ed.gov
1. Issue Identification and Scoping	Scope issue	Architecture Working Group and ASG Leads together initiate scoping effort through Subject area specialist(s)	 Ascertain extent of business need and sponsorship for investigation of issue: Development of recommendations for technical standards Introduction of new technology Estimate effort and cost involved in investigation of issue development of recommendations

Phase	Activity	Performed By	Action Taken
2. Analysis and Recommend- ations	Sponsor the analysis	Architecture Working Group business unit representative for major project needing to address issue	- Based on identified business need, explicitly sponsors effort to develop recommendations for standards, and/or assess benefits and impact on FSA from introduction of new technology
			- Scope of analysis driven by needs of business initiative
			- Recommendations to take enterprise-wide view, rather than project specific view
	Assign responsibility	Jointly by:	- Agree with sponsor, the appropriate
	for analysis	- Architecture Working Group Lead	resources, budget and source for conducting analysis
		- ASG Lead	
	Conduct analysis	Subject area specialists from FSA CIO staff and Enterprise Architecture, as agreed in previous activity	- Develop recommendations for FSA enterprise-wide standards for issue, as scoped
	Perform due diligence	Architecture Support Group (ASG)	- Assess that all appropriate areas are covered, and options considered
3. Acceptance	Accept the analysis and select option, if	Architecture Working Group	- Review recommendations for business applicability and relevance
	appropriate		- Accept recommendations or provide guidance for further analysis
4. Communication and Documentation	Inform Senior Leadership Team	- Architecture Working Group Lead	- Summarize acceptance of recommended guidelines by Architecture Working Group and inform Senior Leadership Team as part of regular reporting cycle
	Communicate the new	Architecture Working	Communicate standards guidelines to:
	standard(s) guidelines	Group / ASG Coordinator	- Mod Partner Leadership Team during Tuesday Leadership meeting
			- Mod Partner and CIO technical leads via email and/or presentation
			- Business Technical staff via email

Phase	Activity	Performed By	Action Taken
	Document the new standard guidelines	Architecture Working Group / ASG CoordinatorFSA CIO staff	 Document standards guidelines in FSA Technical Policies and Standards Guide Update relevant documentation, as appropriate
	Implement the standards	Project teams	- Incorporate recommended guidelines in solution design

3 Purpose and Scope

FSA's Business-Technology Alignment (BTA) process aligns technology related decisions to business needs and priorities. It is used to help new development efforts follow FSA's technology standards. This helps address risks of implementing solutions that do not follow enterprise technology standards, and do not integrate or do not effectively support the business. Not following the enterprise technology standards poses a risk of increasing the complexity and cost of implementing and maintaining FSA's applications. Projects that incorporate non-standard FSA technologies may incur additional and unnecessary costs to test, integrate, maintain, operate and staff the solution.

3.1 Purpose

The purpose of BTA is to help ensure that IT investments support FSA's key business objectives and maintain business relevancy for technology related decisions. It provides repeatable processes and organization for:

- Facilitating technology related decisions that impact the business.
- Introducing new technology.
- Changing the IT architecture standards.
- Assisting projects to ensure they are following FSA technical standards

By implementing the BTA organization and processes FSA benefits in the following areas:

- Business relevancy of technology decisions;
- Technology alignment and management;
- Budgetary control;
- Communication effectiveness;
- Legislative compliance.

3.2 Scope

The scope of Business Technology Alignment (BTA) process within the FSA Modernization effort includes changes to:

- Application technical standards;
- Data standards;
- Security technology standards;

The BTA process and organization are designed to facilitate and support project teams, technical specialists and business leadership representatives to address technical architecture decisions. The BTA organization entities are meant to work with and support technology project teams. The BTA organization has intentionally been designed to be small, with a very limited budget, and is not designed to conduct technical analysis on behalf of project teams.

4 Organization, Responsibilities and Resources

The BTA is facilitated by two main organizational bodies:

- The Architecture Working Group.
- The Architecture Support Group (ASG).

4.1 Architecture Working Group

4.1.1 Architecture Working Group Characteristics

The Architecture Working Group consists of:

- Permanent members who are business representatives and technical architects.
- Approximately 75% business representation: from Business Units, Modernization Partner, FSA CIO and major projects.
- The Architecture Working Group lead, who is elected by the Architecture Working Group members. The Architecture Working Group Lead specifies the agenda and chairs the meetings

4.1.2 Architecture Working Group Responsibilities

Responsibilities of the Architecture Working Group include:

- Understand implications of technical issues on the business.
- Raise issues/exceptions to the Investment Review Board (IRB) for resolution, as necessary.
- Make recommendations (with implications, risks and costs) to IRB for setting direction.
- Provide sponsorship for business-technology alignment efforts, such as development of architecture standards - this helps ensure there is a specific business need for necessary analyses.
- Identify and communicate existing and emerging business-technology alignment issues between the business units and the Architecture Working Group / ASG membership

Note: The charter of the Architecture Working Group is included in Appendix A.

4.1.3 Architecture Working Group Members:

The current members of the Architecture Working Group are:

Role	Architecture Working Group Representative	Backup Members
Business Unit	Robert Laurence - Students Channel	Ginger Klock
Representatives	Anna Allen - Financial Partners	Jackie Anderson
	Paul Hill - Schools Channel	Colleen Kennedy

Role	Architecture Working Group Representative	Backup Members
	Shirley Pratt - CFO	TBD
	TBD - Borrower Services	TBD
	Corwin Jennings - Ombudsman	Debra Wiley
Governance	Ron Sann - General Council	TBD
	Natalie Taylor - Acquisition & Contracts Performance	Patrick Bradfield
FSA CIO EITM Representative	Denise Hill - CIO Enterprise IT Management	
Virtual Data Center	Mike Giordano - CSC Account Management	
(VDC) Operations & Management	Carl Porter - CSC Business Architect	
Management	Jay Walker - CSC Representative	
Integration Partner Representative	Alex Lefur - Business Architecture	Robert O'Keefe
Architecture Working	Terry Hardgrave - Pearson EA Team	
Group - ASG Coordination	Deb White - Pearson EA Team	

4.2 Architecture Support Group (ASG)

4.2.1 ASG Characteristics

The ASG consists of individuals with deep technical expertise, who are:

- "Trusted Advisors" available to projects for consultation and coaching.
- A pool of experienced resources called upon to discuss technology issues and make recommendations.
- The major-project architecture leads from FSA, Modernization Partner and FSA CIO.
- Called-upon by the Architecture Working Group on an "as-needed" basis to address specific technology architecture and standards issues.

4.2.2 ASG Responsibilities

The main responsibilities of the ASG include:

- Consultative roles to projects regarding interpretation, impact, the reasoning behind the technology choices, and advise on issues of migration to FSA IT architecture and standards.
- Reviews with Project Teams, when needed, and identification of issues for Architecture Working Group attention.

- Maintenance and publication of architecture documentation.
- Determination of when smaller or larger changes to architecture are required and shepherding these through the approval process.
- Conducting detailed technology, cost and risk evaluations fro new technologies.
- Driving the overall enterprise architecture process, and creating and maintaining deliverables.

4.2.3 ASG Members

The ASG consists of the following representatives:

Representing	Subject Area Covered	FSA Representative(s)
Enterprise	EAI	Ganesh Reddy
Infrastructure	ITA	Ganesh Reddy
	Security	Robert Ingawalson
	Data	Kathryn Pirnia,
		Jim Greene
	VDC Operations	Mike Giordano
	Network Infrastructure	David Elliott
Projects	COD	Paul Hill
	FMS	Shirley Pratt
	Common Servicing (eServicing, DMCS)	Robert Laurence
Architecture	CIO ITM	Denise Hill
Working Group - ASG	EA	Terry Hardgrave
Coordination		

5 Business-Technology Alignment (BTA) Process

FSA's BTA process is designed to address the following "issues":

- Need for definition of a new FSA technical standard.
- Need to evaluate the business value of introducing a new technology into FSA.

The BTA process utilizes a pragmatic, "just-in-time" approach to development of technical architecture standards and evaluation of appropriateness of a new technology for FSA. The approach is to conduct the necessary assessments and develop recommendations on an asneeded basis for the specific project need while taking an enterprise perspective. Thus, when a need for a FSA technical standard is identified by a project, an effort is initiated to identify options, conduct the necessary analysis and make recommendations driven by the needs of that particular project, but based on the most appropriate tradeoffs and benefits from a FSA-wide perspective. This helps to focus effort and the limited resources where they are most needed and are most impactful, while continuing to populate FSA's technical standards guide.

The BTA process consists of four main phases, each consisting of multiple activities, as depicted below:

1. Issue Identification 2. Analysis and 4. Communications and Phases 3. Acceptance and Scoping Recommendation Documentation Identify issue: Sponsor analysis Select option (if Document and Activities need for technical Assign responsibility for appropriate): communicate new Architecture Working analysis standard standards - introduction of new Conduct analysis Group Review **Implement** Perform due diligence: Request additional recommended technology Escalate Issue ASG Review analysis, or accept solution(s) Scope the issue Recommend standards recommendation(s)

5.1 Issue Identification, Escalation and Scoping

5.1.1 Issue Identification

An issue may consist of one or more of the following:

- Need for definition of a technical standard.
- Need to evaluate the value of introducing a new technology into FSA.

Issues may be identified by multiple sources:

Project Teams During project design or solution development phase when a project

team decides to use technology not previously employed in FSA

solutions.

CIO Staff During regular review and updates of FSA's technical standards, or

when a new technology is planned to be introduced into FSA.

Technical During regular cross-architecture meeting to discuss solution

Architecture Lead integration issues.

5.1.2 Issue Escalation

One main contact point is available for escalating the issue to be addressed by BTA organization. This is:

FSA Chief Architect

o Denise Hill

o Tel: 202.377.3030

o Email: denise.hill@ed.gov

5.1.3 Scoping the Issue

Once the issue has been identified and communicated to either of the two contacts, they will contact the relevant subject area specialist(s), and will scope the need for the standard, together with the Architecture Working Group and ASG coordinators (see example and template in Appendix B). Elements considered when scoping the issue include:

- Which projects/initiatives are driving the need for this technical standard?
- Is the need for the technical standard likely to be relevant to the enterprise, or is it limited to a small specific area only?
- Is there business unit sponsorship for expending effort to research and identify relevant technical enterprise standard(s)?
- How much effort will be needed to research and identify relevant technical enterprise standard(s)?

Once it is determined that the issues lies within the scope of the BTA, a business member of the Architecture Working Group must be identified to sponsor investigation of the issue. This is to help ensure that there is a business relevant need which will guide investigation of the issue and development of the recommendations.

5.2 Analysis and Recommendations

5.2.1 Sponsor Analysis

Any task force setup to investigate an issue and develop recommendations must be sponsored by the Architecture Working Group. At least one business member of the Architecture Working Group is needed to sponsor the analysis and development of recommendations. Generally, this will be the business unit representative whose project has the need for the issue to be addressed. The responsibilities of the sponsor include:

- Help scope the boundaries of the analysis and the needed recommendations, and focus the analysis on issues most relevant to the business project.
- Ensure sufficient and appropriate business unit representatives are available to provide guidance for development of the recommendations.
- Ensure that the recommendations are not limited to a single business unit view only, but that they address an FSA wide perspective.

5.2.2 Assign Responsibility for Analysis

Once the Architecture Working Group has sponsored investigation of an issue, a task force is identified to conduct the effort. This task force may consist of one or more subject area specialists from the ASG. Members of the taskforce will be identified jointly by the:

- FSA CIO EITM Lead.
- Enterprise Architecture Chief Technical Architect.

Funding for the investigative effort will be agreed by the:

- FSA CIO EITM Lead.
- Enterprise Architecture Chief Technical Architect.
- Architecture Working Group.

Development of the recommendations will generally be conducted by the enterprise subject area specialist(s) who are members of the Architecture Support Group (ASG).

5.2.3 Conduct Analysis

Analysis of the issue and development of recommendations is carried out by the ASG members identified in step 5.2.2 above. The outcome of the analysis is a "White Paper" capturing the evaluation and recommendations. Once appropriate due diligence has been carried out, the white paper will provide the guidelines for technical standards that projects will need to follow. The white paper will also provide the basis of any changes that may need to be made to FSA's technical standards. A template for the white paper is included in Appendix C, and a table of contents is suggested below:

Introduction.

- Context.
- Scope.
- Assessing the need for [the issue-solution].
- Description of possible solutions.
- Technical recommendations.
- Implications of recommendations:
 - o Existing systems.
 - o New systems
 - o Systems under construction.
- Appendices.

5.2.4 Conduct Enterprise Architecture Reviews

The recommendations developed during the Conduct Analysis activity are reviewed by the Chief Architect and Enterprise Architecture staff in two stages:

- i. The drafted recommendations are reviewed by Enterprise Architecture Enterprise Infrastructure leads (e.g. EAI, ITA, Security, Data, Operational Infrastructure, Network Infrastructure, and Standards and Architecture). It is recommended that this review be conducted during a group workshop session. Key topics discussed include:
 - Where are the gaps? Which areas or perspectives are not covered?
 - Do the recommendations seem reasonable?
 - What are implications of scope and recommendations from the complete FSA technical architecture perspective?
 - What are the implications of adopting these recommendations from different perspectives:
 - a. VDC: what preparations does the VDC need to make?
 - b. Business channels.
 - c. Enterprise Architecture groups: current projects, EAI, ITA.
 - d. Legacy systems.
 - What are technical implications for domestic and international users and systems?
 - How will the recommendations affect current and planned Enterprise Architecture FSA initiatives?
- ii. A summary of drafted recommendations are presented at the weekly Leadership Meeting (Tuesday afternoon meeting).

5.2.5 Perform Due Diligence: ASG Reviews

There are three steps in this activity:

- i. Review by FSA Enterprise Infrastructure ASG representatives.
- ii. Comments from FSA project and technical leads (ASG members).
- iii. Finalization of white paper for presentation to Architecture Working Group.

5.2.5.1 Review by FSA Enterprise Infrastructure Leads

- i. At completion of the Review, the recommendations are reviewed by FSA
 Enterprise Infrastructure ASG representatives (areas included: EAI, ITA,
 Security, Data, VDC Operations, Operational Infrastructure, Network
 Infrastructure, and Standards and Architecture). Key topics discussed include:
 - Where are the gaps? Which areas or perspectives are not covered?
 - Do the recommendations seem reasonable?
 - What are implications of scope and recommendations from the complete FSA technical architecture perspective?
 - What are the implications of adopting these recommendations from different perspectives:
 - a. VDC: what preparations does the VDC need to make?
 - b. Business channels.
 - c. Current and planned initiatives.
 - d. Legacy systems.
 - What are technical implications for domestic and international users and systems?
 - How will the recommendations affect current and planned FSA initiatives?
- ii. The white paper is circulated to the FSA and Technical Leads for comments.

After comments from the FSA Enterprise Infrastructure Leads are incorporated into the white paper, it is circulated to the FSA and technical leads/representatives for comments.

iii. Finalize white paper for presentation to the Architecture Working Group for acceptance of guidelines.

The white paper is circulated to the Architecture Working Group prior to the meeting, and a summary prepared for presentation. An example of the presentation is attached in Appendix D

5.3 Acceptance of Recommendations by Architecture Working Group

5.3.1 Architecture Working Group Review and Acceptance

An executive summary of the recommendations and supporting reasons are presented to the Architecture Working Group. The Architecture Working Group reviews the recommendations and either agrees with them or provides guidance on further analysis to be conducted. Key questions addressed by the Architecture Working Group during this review include:

- How do the recommendations impact each of the business units and their legacy, current and planned systems?
- What additional funding will be required to implement the guidelines, and will this be acceptable to the business units?

• What are the implications of not implementing the recommended guidelines?

A majority of the business unit representatives is needed to obtain agreement of the recommendations. The decision of the Architecture Working Group will then be summarized and communicated to the FSA Senior Leadership.

5.4 Communication and Documentation

Agreement of the recommendations by the Architecture Working Group is communicated and documented as follows:

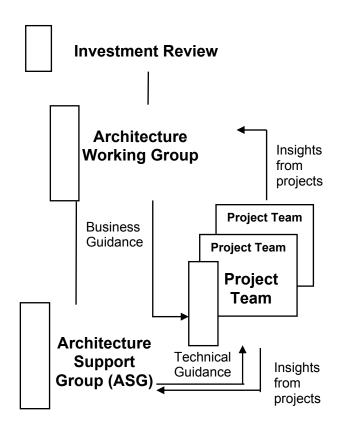
What is communicated	To Whom, How	By Whom
i. Summary of recommended guidelines and implications for business units	FSA Senior Leadership Team at the regular communications meeting	Architecture Working Group chairperson and/or sponsor of the issue.
ii. Summary of recommended guidelines and links to white paper	FSA and Modernization technical project leads	BTA Administrator

Appendix A: Charter - Architecture Working Group

1. OBJECTIVES

The primary objective of the IT Architecture Working Group is to help ensure that technology related decisions are based on a full understanding of the implications, tradeoffs and business benefits for FSA as a whole. The Architecture Working Group helps ensure that:

- Appropriate business input is provided into the decision-making processes;
- Decisions are applicable to, and provide value for, FSA as a whole;
- Technology decisions reinforce and enhance achievement of FSA's business objectives;
- Linkages of how the technology decisions support specific business initiatives are well communicated.



2. MEMBERSHIP

2.1 Architecture Working Group Members:

These will be permanent members providing continuity through the life of the group. These members will be regular Architecture Working Group participants, and stand-ins will occur only in exceptional circumstances, and very infrequently. Approximately 75% of the members will be business representatives. The Architecture Working Group will consist of:

- Business representatives from Students, Schools, and Financial Partners channels, and CFO;
- FSA Deputy CIO EITM;
- o FSA Business Integration Representative;

- o Modernization Partner Business Integration Representative;
- o Enterprise Architecture Chief Technical Architect;
- o Enterprise Architecture Project Manager.
- Other specialists will be assigned to the Architecture Working Group on an as-needed basis.
- The Architecture Working Group Members will identify the need for creation of taskforce(s) (e.g. Mad-dog IPTs) to investigate and report back on specific issues identified and scoped by the Architecture Working Group.
- In principle, the lead of the Architecture Working Group will always be a FSA business representative. The term of appointment will rotate each calendar quarter, and the Architecture Working Group Lead will be reconfirmed or reappointed by the Architecture Working Group at the end of each term. Key characteristics of the individual fulfilling this role are:
 - o FSA business representative, trusted and well regarded by business leadership;
 - o Good understanding of technology and how it impacts the business;

2.2 Architecture Support Group (ASG)

The AWG members will be assisted by the Architecture Support Group (ASG) consisting of the following:

- FSA CIO staff;
- Chief Technical Architect;
- ITA/Business specialists;
- Technical representatives from major projects.

2.3 Project Team Representatives:

These are business and technical specialist(s) from projects. These members will interact with the ASG and the Architecture Working Group through specific issue taskforces, and/or through raising technical standards related issues to the Architecture Working Group.

3. SCOPE

The scope of responsibilities for the Architecture Working Group will be all elements <u>impacting</u> the technical standards for technology solutions within FSA as referenced in the FSA ITA Framework. Specifically these include, but are not limited to:

- Business architecture: specifically, the impact of technology changes on the business;
- IT architectures: information, applications, security, and infrastructure.

The following are specifically out of scope of responsibilities of the Architecture Working Group:

• Enterprise organization structure;

• HR management issues, except where there is a direct impact on the technical skills requirements/availability, and which have significant business implications for business applications and/or infrastructure solutions.

4. ROLES AND RESPONSIBILITIES

4.1 Architecture Working Group

The Architecture Working Group will represent business unit interests, and help ensure that technology related decisions are based on a full understanding of the implications of tradeoffs and business benefits for FSA as a whole. It will raise issues for resolution to the Investment Review Board (IRB)/ Management Council (MC), as appropriate. Responsibilities of the Architecture Working Group Members include:

- Understand implications for the business and the Enterprise IT Architecture of the technology changes being considered;
- Advise on business and technical issues of migration of solution design and technology to standards;
- Raise issues/exceptions arising out of project needs to IRB/MC for resolution, as appropriate;
- Make recommendations (with implications, risks and costs) to IRB/MC for setting direction.

4.2 Architecture Support Group (ASG)

The Architecture Support Group (ASG) will perform a coaching, advisory and consulting role to the project teams providing best practices and insights from experiences across projects and FSA. ASG representatives will provide guidance to projects through involvement at key checkpoints in the FSA Solution Life Cycle (SLC) process. The responsibilities of the ASG will be to:

- Act as consultants to projects, through peer group reviews, especially during early phases (e.g. Vision and Definition) regarding interpretation, impact, and the reasoning behind the technology choices;
- Conduct detailed technology, cost and risk evaluations, as directed by the Architecture Working Group;
- Maintain and publish the IT architecture documentation;
- Run education sessions, publicity, demonstrations of architecture and its business benefits:
- Drive the overall enterprise architecture process, creating and maintaining deliverables;
- Determine when smaller or larger changes to architecture are required and shepherd these through the approval process;
- Provide support for Architecture Working Group meetings e.g. minutes, action items, etc.

4.3 Project Teams

These teams include both business initiatives (COD, FAFSA, eCB, etc.) and technical initiatives (EAI, ITA, SSO, etc.) teams. Responsibilities of the Project Teams include:

- Hear and respond to user requests for exceptions to the published standards and bring these forward to the Architecture Working Group;
- Incorporate technical architecture standards into solution design, and raise request for exceptions where appropriate;
- Represent the requirements of their projects for technical architecture capabilities and support;
- Bring insights from day-to-day implementation and use of technical architectures.

5. DECISION MAKING

Decision making within the Architecture Working Group will be on a consensus basis. A majority of business unit representatives need to be present for the decisions to be valid. The Architecture Working Group will also assess when issues need to be escalated to the IRB/MC for resolution. This will occur when consensus is not achieved, or when the proposed changes are expected to significantly impact the business.

6. FUNDING

Funding for the Architecture Working Group will be from the operational budget:

- The Business SMEs will be funded through the business, as today. Architecture Working Group membership will be part of their continuing functional responsibility and role(s);
- The FSA CIO ITM will be funded through the CIO budget;
- The project team representatives will be funded as part of the project, and will be representing the interests of the project on the Architecture Working Group;
- The Modernization Partner Business Integration Lead will be funded by the Modernization Partner PMO; and the Chief Technical Architect will be funded through the CIO budget. The AWG responsibilities will be part of their on-going role;
- The Architecture Support Group (ASG) will be funded through the CIO budget.

Appendix B: Issue Scoping - Sample



Example: The architecture and standards issue is documented and addressed to the Architecture Working Group - ASG Coordinator(s).

	Encryption	ILLUSTRATIVE
Issue	 Privacy data of customers and partners is not appropria mandated by law. 	ately protected - as
	 There appear to be some commonly accepted solutions lack of clarity on actual SFA policy 	s for certain situations and
Description	 The issue is being addressed on an ad-hoc basis and in a project by project basis (e.g. eServicing) 	ndividually being solved on
	Other applications such as COD are currently addressing	ng the same issue
	 An SFA policy needs to address data privacy for at least 	st three cases:
	 Inside the data center at the data store level (e.g. 	log-in credentials)
	Internet data transfer	
	Bulk data transfer	
	 SFA needs to determine which mechanism for protectir and what the standards and permissible exceptions ma 	
Risks	 Privacy data not encrypted when sent from SFA system sent from ACS to NCS for Loan Servicing). ACS, NSC physical access to hardware. 	
	■ Potential of hackers gaining access to network devices	and data
Consequences	Potential fines for SFA	
20110044011000	■ Compromised public trust arising from adverse publicity	/
) - Draft	Page - 1	Proprietary to Accenture

Appendix C: White Paper Template

FSA Modernization Program

United States Department of Education
Federal Student Aid



Recommendations by the ASG For the **Name of Business Issue** White paper

Version x.x

Date

Document Revision History

Version No.	Date	Author	Revisions Made

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Introduction

FSA's Business-Technology Alignment (BTA) framework utilizes a pragmatic, "just-in-time" approach to the development of technical architecture standards. The approach is to develop and recommend technical standards on an as-needed basis for the specific project need while taking an enterprise perspective. Thus, when a need for a FSA technical standard is identified by a project, an effort is initiated to identify options, conduct the necessary analysis and make recommendations driven by the needs of that particular project, but based on the most appropriate benefits and tradeoffs from a FSA-wide perspective. This focuses the effort and the limited resources where they are most needed and will make the greatest impact, while continuing to populate FSA's technical standards guide.

This document describes the issue triggering the need for

This document addresses recommendations...

Context

Describe why this is important, the associated risks of not addressing the need, what areas it has impacted, what the Architecture Working Group has requested the ASG to do. Include any diagrams that would provide additional context.

This request follows the procedures of the Business Technology Alignment (BTA) framework developed by FSA.

Scope

FSA system managers require standard procedures to encrypt and protect sensitive application data that is transmitted to meet their overall business needs. This document provides proposed recommendations for:

- ? Data transmissions between the FSA and external systems through the PSTN.
- ? Application-to-application transmission.
- ? Application-to-end user via the Internet.

This document does not address the following:

- ? xx
- ? xx
- ? xx

These represent future topics to be addressed by the Architecture Working Group.

Assessing the Business Need

Provide a description of the FSA business issue. Include why is this is an organizational issue, how it impacts the organization, describe the types of risks/risk assessments associated with the issue, what groups will be impacted, how does this affect the FSA public image, what federal guidelines enforce this, etc. Also include any relevant FSA technical policy standards and definitions.

Descriptions of Possible Technical Solutions

The following are solutions for the **business issue**:

- 1) Name of Solution
 - Functional Description of the solution.
- 2) Name of Solution
 - Functional Description of the solution.
- 3) Name of Solution
 - Functional Description of the solution.
- 4) <u>Etc...</u>.

Technical Recommendations/Guidelines

Provide the available options that can satisfy the business need. Include what types of applications/groups should 'operationalize' them, how the technical teams would determine how the recommendation/guideline would be applied, what products does FSA currently have available to support the technical aspect of the recommendation/guideline, or it new software & hardware would be required.

- 1) Name of Recommendation/Guideline.
 - Functional description of the recommendation/guideline.
 - *Rationale*: Include why this recommendation/guideline is suitable. Include the high level impact for the projects, FSA & the VDC.
- 2) Name of Recommendation/Guideline.
 - Functional description of the recommendation/guideline.
 - *Rationale:* Include why this recommendation/guideline is suitable. Include the high level impact for the projects, FSA & the VDC.
- 3) Nnn....
 - Functional description of the recommendation/guideline.
 - *Rationale:* Include why this recommendation/guideline is suitable. Include the high level impact for the projects, FSA & the VDC.

Basis For Recommendation

Describe the basis or reason for selecting this recommendation/guidelines. Include information from other FSA projects, and what that impact was.

Implications of Recommendations

Existing Systems

Provide the recommendation for systems/applications already in the FSA production environment. Address any waivers or 'grandfathering' actions. Describe what the potential risks are to the organization and the business owners by either accepting or rejecting the recommendation.

NewSystems

Provide the recommendation for new systems/applications that are in the requirements definition stage and have not begun the development. Address any recommendations and requirements that should be considered. Describe what the potential risks are to the organization and the business owners by either accepting or rejecting the recommendation.

Systems Under Construction

Provide the recommendation for systems/applications currently have completed the requirements definition and are in the development phase of the project. Address any recommendations and requirements that should be considered. Describe what the potential risks are to the organization and the business owners by either accepting or rejecting the recommendation.

^{**} Make technical recommendation(s) conclusion here **

Appendices

Appendix A: Federal, Department of Education, & FSA Policy

The following policies provide guidance regarding the protection of confidential information. The procedures used to protect information must adhere to these policies:

Appendix D: Meeting Minutes Template

Business Technology Alignment (BTA)

Architecture Working Group Meeting Minutes

Month, Day, Year

Location:	830 1st Street, NW, UCP (room XXX), 9:30 – 11:00
Present:	
Agenda:	
Action Items:	Previous:
	New:
	Completed since last meeting:
Issues/Risks:	
Next Meeting:	Tabled Topics:

Meeting Discussion Items: